

Title (en)
Rupture disc

Title (de)
Berstscheibe

Title (fr)
Disque de rupture

Publication
EP 1582789 B1 20101124 (EN)

Application
EP 05251333 A 20050304

Priority
GB 0407142 A 20040330

Abstract (en)
[origin: EP1582789A1] Valves 1 and methods for controlling the release of a substance, the valves 1 comprising a housing having an inlet 3 for connection to a source of the substance, an outlet 5 and a passage 7 extending therebetween, the passage 7 enclosed by a ceramic disc 9 and means being provided to apply an electrical pulse to the disc to break the disc 9 and so connect the inlet 3 to the outlet 5, and the methods comprising the steps of containing the substance in a container, connecting the container to a valve 1 comprising a housing having an inlet 3 for connection to the source of the substance, an outlet 5 and a passage 7 extending therebetween, the passage 7 being closed by a ceramic disc 9, and applying an electrical pulse to the disc 9 to break the disc 9 and connect the inlet 3 to the outlet 5. The valves and methods are particularly suited, but not limited, to the control of substances such as pressurised fire extinguishing media.

IPC 8 full level
F16K 31/02 (2006.01)

CPC (source: EP GB US)
A62C 37/16 (2013.01 - GB); **A62C 37/46** (2013.01 - GB); **F16K 13/04** (2013.01 - EP US); **F16K 17/403** (2013.01 - EP US);
F16K 31/02 (2013.01 - EP US); **A62C 37/40** (2013.01 - EP US); **Y10S 137/91** (2013.01 - EP US); **Y10T 137/1632** (2015.04 - EP US);
Y10T 137/1692 (2015.04 - EP US); **Y10T 137/1744** (2015.04 - EP US)

Cited by
DE102010063997B3; US9970561B2; WO2012084293A1; EP2778486A2; US9261200B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1582789 A1 20051005; EP 1582789 B1 20101124; AT E489574 T1 20101215; BR PI0501108 A 20051101; BR PI0501108 B1 20151229; CN 1692964 A 20051109; CN 1692969 B 20110727; DE 602005024883 D1 20110105; ES 2355391 T3 20110325; GB 0407142 D0 20040505; GB 2412583 A 20051005; GB 2412583 B 20070926; HK 1085148 A1 20060818; RU 2005109124 A 20061010; RU 2010102697 A 20110810; RU 2386463 C2 20100420; US 2005217724 A1 20051006; US 7281544 B2 20071016

DOCDB simple family (application)
EP 05251333 A 20050304; AT 05251333 T 20050304; BR PI0501108 A 20050329; CN 200510067633 A 20050330; DE 602005024883 T 20050304; ES 05251333 T 20050304; GB 0407142 A 20040330; HK 06105373 A 20060508; RU 2005109124 A 20050329; RU 2010102697 A 20100127; US 7943605 A 20050314